

PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number Q79956	
Mail Stop AF Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450	Application Number 10/787,145	Filed February 27, 2004	
	First Named Inventor Christophe PREGUICA		
	Art Unit 2144	Examiner Shirley X. ZHANG	
<p style="text-align: center;">WASHINGTON OFFICE 23373 CUSTOMER NUMBER</p>			
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal</p> <p>The review is requested for the reasons(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p><input checked="" type="checkbox"/> I am an attorney or agent of record.</p> <p>Registration number 58,290</p>			
		<p>/Logan J. Brown 58,290/ Signature</p>	
		<p>Logan J. Brown Typed or printed name</p>	
		<p>(202) 293-7060 Telephone number</p>	
		<p>December 9, 2008 Date</p>	

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Docket No: Q79956

Christophe PREGUICA, et al.

Appln. No.: 10/787,145

Group Art Unit: 2144

Confirmation No.: 4599

Examiner: Shirley X. ZHANG

Filed: February 27, 2004

For: ADDRESS SEQUENCING IN A DOMAIN NAME SERVER

PRE-APPEAL BRIEF REQUEST FOR REVIEW

MAIL STOP AF - PATENTS

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

Pursuant to the Pre-Appeal Brief Conference Pilot Program, and further to the Examiner's Final Office Action dated June 10, 2008, Applicant files this Pre-Appeal Brief Request for Review. This Request is also accompanied by the filing of a Notice of Appeal.

Turning to the rejection at issue, claims 1-4 are rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Draves in view of Kavanagh and Moore. (*see* Final Office Action, P. 4 for full citation). Applicant respectfully submits that the cited combination of references fails to teach or suggest at least a DNS server comprising:

address sequencing means, for sequencing, as a function of [an] address of the first network element, a plurality of IPv6 addresses associated with said second network element, and for putting one or more IPv6 addresses associated with said second network element in the order of the sequence in said response [to a request identifying the first network element]

First, as detailed in Applicant's Amendment under 37 C.F.R. § 1.111 filed February 26, 2008, Kavanagh fails to teach or suggest anything regarding a **"plurality of [] addresses [of] a given network element."** When Kavanagh refers to a plurality of addresses, those belong to **different network elements**. (Kavanagh, col. 5, lns. 1-4; col. 9, lns. 9-15). Indeed, the entities that are subjected to preference ordering **are respective nodes represented by respective**

addresses. (Kavanagh, col. 2, lns. 1-11). Thus, Kavanagh sequences addresses of “a plurality of nodes” and not a plurality of IPv6 addresses [of] a given network element.

Second, in the Advisory Action, the Examiner asserted that Draves merely fails to “expressly” disclose the sequencing being performed on a DNS server. (Advisory Action, P. 2). However, Applicant respectfully submits that Draves explicitly discloses the sequencing being performed on a node, not the DNS server. In particular, in paragraphs 3 and 4 of section 1, Draves teaches that a node queries a DNS server to resolve a given name. Then, the DNS returns a set of addresses comprising a global IPv6 address and a global IPv4 address. Then, the node uses a destination address selection algorithm for choosing among the set of addresses. Therefore, it is clear that the node applies the destination ordering rules in section 6 to the set of addresses returned by the DNS, not the DNS.

To supplement for this deficiency, the Examiner asserted that Moore would have motivated the skilled artisan to have the DNS server perform the sequencing of the addresses. However, Applicant submits that Moore fails to teach anything specific to a DNS server.

First, the socket getaddrinfo() is a generic function through which an application requests an operating system to convert a name into an address. Applicant submits that getaddrinfo() is not at all specific to DNS servers. It is implemented by a variety of network elements, including any IP host, through a variety of lower layer functions.

Second, the Examiner asserted that the following statement would indicated to the skilled artisan that sequencing should be performed on a DNS server:

[W]hat is needed is to stop relying so much on applications/hosts choosing destination addresses. Hosts should have as few addresses as possible. The network should make a best effort to deliver the traffic to whatever address is used over the links permitted for such use.

Applicant respectfully submits that the Examiner has read this statement in hindsight. In

particular, Applicant respectfully submits that Moore was merely stating that the number of addresses returned by the network should be reduced. (Moore, Lns. 7-9, “**Hosts should have as few addresses as possible . . . links permitted for such use.**”). Nothing in the above statement mentions the DNS server sequencing, “as a function of [an] address of the first network element”, a plurality of addresses of a second network element and “putting [plurality of addresses] in the order of the sequence in [a] response. Moore simply indicated that the reliance on the host (i.e. node) should be reduced by reducing the number of addresses from which the nodes had to choose. However, clearly, Moore was still suggesting that the application/hosts choose destination addresses. (Moore, Lns. 6, “**stop relying so much**”).

Applicant now turns to the whole thread of e-mails from which MOORE’s disclosure is extracted in order to clarify the technical content of this disclosure in view of the context in which it appeared. (see <http://www.ops.ietf.org/lists/v6ops/v6ops.2002/maillist.html#00887>).

Looking at the date index of the thread, the discussion “Re: getaddrinfo address ordering” starts with message number #00856, dated 27 Nov 2002 09:22:04 +0200 and ends with message #00887, dated 28 Nov 2002 08:01:39 –0500. The discussion comprises 26 messages.

The discussion starts on the topic of enhancing a getaddrinfo resolver in an IP host (*we would want to add some extra smarts to getaddrinfo*). The resolver is called by an application (*you need the address ordering to be sensitive to both network configuration and to the particular application.*) The resolver is processing DNS records returned by a DNS server with some default ordering. The getaddrinfo resolver at the IP host is intended to return the records to the calling application with a potentially different order (*you want to influence the default DNS record ordering*). Thus, the discussion initially focuses on an IP host, e.g. a DNS client, and an

application run thereon. Besides, this initial focus remains the same for the next 23 messages, until message #00883. Also, it is noteworthy that message #00860 explicitly refers to Draves.

In Message #00867, MOORE gives his own vision of how the network could help in the process of address ordering. The local network would provide the IP host with a configuration file that specifies the preferred ordering (*eventually it might be nice if the host could get that preference list from the local network*).

Actually messages #00878 and #00883 focus on the application run by the IP host.

Then for the first time in message #00886, the focus is shifted from the IP host to “some server”. However, YOSHIFUJI’s statement is very elliptical. No information is provided about the undefined server. This statement starts to broaden the focus of the discussion but does not provide any clear direction. It is worth noting that no-one in the recipients elaborated on YOSHIFUJI’s idea. This may indicate that YOSHIFUJI’s statement was not even understood.

MOORE’s response in message #00887 does not elaborate on “some server selection method”. Quite oppositely, it broadens the discussion one step further by referring to “the network” as a whole, which implies that the focus proposed by YOSHIFUJI’s was either not understood or not considered relevant by MOORE. It is worth noting that MOORE’s message #00867 already specified the way the network could contribute to address selection. By referring to the network, message #00887 appears to hint at that earlier post by the same author.

Besides, MOORE’s last message further broadens the topic of the discussion from address selection to delivery of traffic (*to deliver the traffic to whatever address is used over the links permitted for such use.*) Hence it presents a broad perspective in a way that typically ends a discussion without deciding any practical conclusion or action point. Indeed no one responded.

From this whole thread, the person skilled in the art was not incited to change the operation of a DNS server in any way. As far as DNS servers are considered, the default ordering is assumed to be used. Further YOSHIFUJI's statement is not enabling and fails to point to any specific server whereas possibilities are innumerable (e.g. a server dedicated to selection services). Thus, the Examiner cannot assert that YOSHIFUJI was inherently referring to a DNS server.

As such, Applicant respectfully submits that, in the context in which Moore was written, Moore clearly fails to teach or suggest that a DNS server should be modified to sequence a plurality of addresses as claimed.

Thus, Applicant respectfully submits Draves in view of Kavanagh and Moore fail to teach or suggest at least a **DNS server sequencing, "as a function of [an] address of the first network element", a plurality of addresses of a second network element and "putting [plurality of addresses] in the order of the sequence in [a] response.**

As such, Applicant respectfully submits that claims 1-4 would not have been obvious under 35 U.S.C. § 103(a). Accordingly, Applicant respectfully requests the Examiners withdraw the rejection of claim 1 and claims 2-4 at least by virtue of their dependency from claim 1.

Respectfully submitted,

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

/Logan J. Brown 58,290/
Logan J. Brown
Registration No. 58,290

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